

REMARKS

Claims 1-4 and 6-13 are currently being prosecuted. Claims 1 and 11 are independent.

Claim 1 has been amended, which is supported by at least Figs. 1-3 and their corresponding descriptions of the present specification.

The Examiner is respectfully requested to reconsider his rejections in view of the amendments and remarks as set forth below.

Rejections under 35 U.S.C. §§ 102 and 103

Claims 1-4, 6, and 10-12 stand rejected under 35 U.S.C. § 102 as being anticipated by Astrom (U.S. Patent 7,118,311). Claims 5, 7-9 and 13 stand rejected under 35 U.S.C. § 103 as being obvious over Astrom. These rejections are respectfully traversed.

While not conceding to the Examiner's rejection, but to merely advance the prosecution only, claim 1 has been amended to further emphasize the distinctions between the present invention and the applied art.

The present invention is directed to a milling cutter, comprising a cutter body provided with a plurality of insert seats and a cutting insert having a hexahedral shape and inserted into and selectively fastened to each of the insert seats in either end of each of two perpendicular directions as recited in claim 1. The present invention recited in claim 11 also has similar features.

Specifically, each insert seat 112 has two inner surfaces 114a, 114b with a locking hole 116a, 116b, respectively for receiving the locking screw 118. The first inner surface 114a is perpendicular to a radius of the cutter body 110 and the second inner surface (adjoining surface) 114b is perpendicular to the first inner surface 114a. See Fig. 1 of the present invention. More

specifically, the second inner surface 114b contacts an upper surface 122 or lower surface 124 of the cutting insert 120. Then, the second locking hole 116b of the insert seat 112 precisely communicates with the through hole 126 of the cutting insert 120. In this state, the locking screw 118 is tightened into the second locking hole 116b after passing through the lower surface 124 of the cutting insert 120. Likewise, other cutting inserts 120 are sequentially seated in and fastened to the remaining insert seats 112. Then, the cutting insert 120 seated in any insert seat 112 is arranged at an angle of 90° with respect to other cutting inserts 120 seated in adjacent insert seats. See, for example, pages 8 and 9 of the present specification.

By way of the claimed structure, the cutting insert 120, selectively fastened to the cutter body 110, can alternate at an angle of 90°. Thus, the present invention extends the lifetime of the cutting inserts 120.

As discussed above, the cutting insert 120 of the present invention is inserted into and selectively fastened to each of the insert seats 112 in either end of each of two perpendicular directions.

In contrast, the cutting insert 9 of Astrom can be assembled only in one single way in the seat of the cassette 3, viz. with the make element in engagement with the recess 20 in the cutting insert 9. See column 6, lines 43-64 of Arstrom. Thus, Astrom's cutting insert 9 has no room for providing a selective fastening to each of the insert seats in either end of each of two perpendicular directions.

Accordingly, the present invention as recited in claim 1 is not anticipated or made obvious from the Astrom reference. Claims 2-4 and 6-10 depend from claim 1 and as such are also considered to be allowable.

Claim 11 is an independent claim which also describes the seat as having two perpendicular inner surfaces with each surface having a locking hole. This claim also states that the cutting insert is selectively fastened to one of the first and second perpendicular inner surfaces which is not seen in the reference. Accordingly, Applicants submit that claim 11 is

allowable for similar reasons presented in regard to claim 1. Claims 12 and 13 depend from claim 11 and as such are also considered to be allowable. Accordingly, Applicants submit that these claims are additionally allowable.

Conclusion

In view of the above remarks, it is believed that the claims clearly distinguish over the patent relied on by the Examiner. In view of this, reconsideration of the rejection and allowance of all the claims are respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact James T. Eller, Jr., Reg. No. 39,538, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

By 

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